

5

Claims

1. A method of enriching procaryotic DNA, said method comprising the steps of:
 - 10 a) contacting at least one procaryotic DNA in solution with at least one protein or polypeptide which is capable of specifically binding to the procaryotic DNA, thus forming a protein or polypeptide DNA complex, and
 - b) separating said complex.
- 15 2. The method as claimed in Claim 1, wherein the separation is followed by a step of separating the DNA and the protein or polypeptide.
3. The method as claimed in any one of the preceding Claims, wherein the protein or the polypeptide is coupled to a carrier.
- 20 4. The method as claimed in Claim 3, wherein the protein or the polypeptide is coupled directly to said carrier.
5. The method as claimed in Claim 3, wherein the protein or the polypeptide is coupled
- 25 to the carrier via an antibody directed against it.
6. The method as claimed in any one of Claims 3 to 5, wherein the carrier is provided as a matrix, as microparticles or as a membrane.
- 30 7. The method as claimed in any one of Claims 1 or 2, wherein separation is effected by means of an antibody or antiserum directed against the protein or polypeptide.
8. The method as claimed in Claim 1, wherein separation is effected by means of electrophoresis.
- 35 9. The method as claimed in any one of the preceding Claims, wherein the protein or the polypeptide is an antibody directed against non-methylated CpG motifs or is a corresponding antiserum.



10. The method as claimed in any one of Claims 1 to 8, wherein the protein or polypeptide is encoded by the TLR9 gene or by the CGBP gene.
- 5 11. The method as claimed in Claim 10, wherein the protein or polypeptide is encoded by a cDNA with a sequence having a homology of at least 80 %, preferably at least 90 %, to the sequence according to gene bank access no. XM-165661.
- 10 12. The method as claimed in Claim 10, wherein the protein or polypeptide is encoded by cDNA with a sequence having a homology of at least 80%, preferably at least 90%, to the sequence according to gene bank access no. AB045180 or a fragment thereof, preferably cDNA having a homology of at least 80%, particularly preferably at least 90%, to transcript variant A (gene bank access no. NM-138688) or transcript variant B (gene bank access no. NM-017442).
- 15 13. The method as claimed in Claim 1, wherein the solution contains a mixture of eucaryotic and procaryotic DNA.
14. The method as claimed in Claim 13, wherein the solution is a body fluid.
- 20 15. A method of purifying body fluids from procaryotic DNA as claimed in Claim 14, wherein separation is effected extracorporally under sterile conditions.
16. A method of detecting procaryotic DNA as claimed in any one of Claims 1 to 14, wherein a step of amplifying the procaryotic DNA follows.
- 25 17. A kit for enriching procaryotic DNA by means of a method as claimed in any one of Claims 1 to 14.
- 30 18. A test kit for detecting procaryotic DNA by means of a method as claimed in Claim 16, comprising one or more sets of specific primers.

